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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,171	10/31/2003	Michael Gerard Wallace	23614.84034	1618
7590	02/17/2006			EXAMINER HINZE, LEO T
Warner Norcross & Judd LLP 900 Fifth Third Center 111 Lyon Street, N.W. Grand Rapids, MI 49503-2487			ART UNIT 2854	PAPER NUMBER

DATE MAILED: 02/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	M.G.
	10/699,171	WALLACE, MICHAEL GERARD	
	Examiner	Art Unit	
	Leo T. Hinze	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 12 December 2005.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-9 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-9 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 31 October 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Zaslawsky, US 4,881,213 (Zaslawsky).

a. Regarding claim 1, Zaslawsky teaches a clock dial comprising: a rotatable moon dial (36, Fig. 3) having a perimeter and a plurality of identical teeth uniformly spaced about said perimeter, each of said teeth being generally symmetrical (see picture of teeth on gear 36, Fig. 3); a rotatable driving gear (30, Fig. 3) having a pin (48, Fig. 3) extending therefrom, said pin positioned to engage one of said teeth with each rotation of said driving gear to rotatably advance said moon dial (col. 3, ll. 39-42), each of said symmetrical teeth permitting said pin to increment said moon dial one tooth forward or backward depending on the direction of rotation of said driving gear.

b. Regarding claim 5, Zaslawsky teaches a clock dial movement device for advancing a moon dial comprising: a drive disk (30, Fig. 3), said drive disk in rotation actuated by the clock movement; a pin (48, Fig. 3) protruding from said drive disk; a moon disk (36, Fig. 3) having a plurality of generally symmetrical teeth (see picture of teeth on gear 36, Fig. 3), said pin

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engaging said teeth such that said moon disk increments one tooth per forward or backward revolution of said drive disk (col. 3, ll. 39-42).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-4, 6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zaslawsky in view of Wilcox, US 2,336,519 (Wilcox).

a. Regarding claim 2:

Zaslawsky teaches all that is claimed as discussed in the rejection of claim 1 above, including wherein said moon dial has an axis of rotation.

Zaslawsky does not teach a friction means for applying rotational friction to said moon dial, said friction means mounted on said axis.

Wilcox teaches a clock with a friction washer (26, Fig. 1) that exerts frictional pressure on various parts to prevent unwanted rotation due to momentum or unbalance (p. 2, ll. 20-29).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Zaslawsky to add a friction washer on the axle of the moon disk, because Wilcox teaches that such a washer is advantageous for exerting frictional pressure on

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rotating parts to prevent unwanted rotation, and a person having ordinary skill in the art would also recognize that friction washers would provide a secure assembly in the axial direction, and prevent unwanted motion of the moon disk that could cause rattles during operation.

b. Regarding claim 3, the combination of Zaslawsy and Wilcox teaches all that is claimed as discussed in the rejection of claim 2 above. Wilcox also teaches wherein the friction means comprises a wave washer (26, Fig. 1).

c. Regarding claim 4, the combination of Zaslawsy and Wilcox teaches all that is claimed as discussed in the rejection of claim 3 above. Zaslawsy also teaches wherein said driving gear completes one revolution every twenty-four hours (col. 3, ll. 24-26).

d. Regarding claim 6:

Zaslawsy teaches all that is claimed as discussed in the rejection of claim 1 above, except wherein a wave washer maintains a consistent friction with said moon disk, preventing said disk from incrementing when not engaged by said pin.

Wilcox teaches a clock with a friction washer (26, Fig. 1) that exerts frictional pressure on various parts to prevent unwanted rotation due to momentum or unbalance (p. 2, ll. 20-29).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Zaslawsy to add a wave washer that maintains a consistent friction with said moon disk, preventing said disk from incrementing when not engaged by said pin, because Wilcox teaches that such a washer is advantageous for exerting frictional pressure on rotating parts to prevent unwanted rotation, and a person having ordinary skill in the art would also recognize that friction washers would provide a secure assembly in the axial

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direction, and prevent unwanted motion of the moon disk that could cause rattles during operation.

e. Regarding claim 9:

Zaslawsy teaches a mechanism for rotating a moon dial on a clock movement comprising: a moon disk axis; a moon disk (36, Fig. 3) rotatable on said moon disk axis, said moon disk including images of the moon on one surface (24, Fig. 1), said moon disk including a plurality of teeth about the circumference of said moon disk, each of said teeth having a symmetric profile (see picture of teeth on gear 36, Fig. 3); and a drive disk (30, Fig. 3) rotatable about a second axis, said drive disk including a pin (48, Fig. 3) extending from said drive disk, said pin periodically interfitting with said teeth on said moon disk, said pin incrementally rotating said moon disk forward or backward one tooth for each revolution of said drive disk (col. 3, ll. 39-42).

Zaslawsy does not teach a friction device on said moon disk axis creating friction between said disk and said moon disk axis.

Wilcox teaches a clock with a friction washer (26, Fig. 1) that exerts frictional pressure on various parts to prevent unwanted rotation due to momentum or unbalance (p. 2, ll. 20-29).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Zaslawsy to add a friction device on said moon disk axis creating friction between said disk and said moon disk axis, because Wilcox teaches that such a washer is advantageous for exerting frictional pressure on rotating parts to prevent unwanted rotation, and a person having ordinary skill in the art would also recognize that friction washers

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would provide a secure assembly in the axial direction, and prevent unwanted motion of the moon disk that could cause rattles during operation.

f. Regarding claim 10, the combination of Zaslawsy and Wilcox teaches all that is claimed as discussed in the rejection of claim 9 above. Wilcox also teaches wherein the friction means comprises a wave washer (26, Fig. 1).

5. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zaslawsy in view of Wilcox as applied to claim 6 above, and further in view of Erard, US 4,548,512 (Erard).

a. Regarding claim 7:

The combination of Zaslawsy and Wilcox teaches all that is claimed as discussed in the rejection of claim 6 above, including wherein said drive disk makes one revolution per 24 hours (Wilcox, col. 3, ll. 24-26).

The combination of Zaslawsy and Wilcox does not teach wherein said drive disk makes one revolution per 12 hours.

Erard teaches a watch with a moon disk where the moon disk is driven by the hour wheel which rotates one revolution per 12 hours (col. 1, ll. 24-28).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to further modify Zaslawsy wherein said drive disk makes one revolution per 12 hours, because Erard teaches that a moon disk can be driven by an hour wheel, and a person having ordinary skill in the art would recognize that one could drive the moon disk directly from an hour wheel of a clock, which rotates one revolution per 12 hours, or from a

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separate drive wheel which rotates one revolution per day, because a person having ordinary skill in the art would drive the moon disk by whichever method is most advantageous for each particular drive configuration and mechanism for each individual type of clock.

b. Regarding claim 8, the combination of Zaslawsy, Wilcox and Erard teaches all that is claimed as discussed in the rejection of claim 7 above. Zaslawsy also teaches wherein said clock has conventional hands and said disk may be incremented forward or backward by any manual or automatic rotation of said hands (col. 4, ll. 39-46).

Response to Arguments

6. Applicant's arguments filed 12 December 2005 have been fully considered but they are not persuasive.

7. Regarding applicant's arguments on p. 6 that in order to set the Zalawsky moon dial, a user must turn the hand of the watch successively backwards and forwards, and therefore Zalawsky does not disclose a pin that engages the teeth of the moon disk such that the moon disk increments forward or backward, claims 1, 5 and 9 only require forward *or* backward [emphasis added] motion of the moon dial. Zalawsky satisfies this requirement ("At each revolution of the wheel 30 the pin 48 engages one tooth of the wheel having fifty-nine teeth 36 and causes it to advance by one step," col. 3, ll. 39-42).

8. In response to applicant's arguments on p. 7 against the Wilcox reference individually, arguing that Wilcox does not even disclose a moon disk, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

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See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

9. In response to applicant's argument on p. 8 that Erard expressly teaches away from the present invention because Erard teaches preventing the moon disk from rotating backward, claims 7 and 8 only require forward *or* backward [emphasis added] motion of the moon dial.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (571) 272-2167. The examiner can normally be reached on M-F 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leo T. Hinze
Patent Examiner
AU 2854
13 February 2006



Daniel J. Colilla
Primary Examiner
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